

SPECIAL BULLETIN B and POLREP 06

West Dauphin Chemical Site
2932 Dauphin Street
Philadelphia, PA 19132

Date: September 13, 2000

To: Regional Response Center

From: Jack Kelly, On-Scene Coordinator
Removal Response Section (3HS31)

Subject: Verbal Cost Ceiling Increase

I. Introduction

On August 17, 2000, the On-Scene Coordinator (OSC) conducted an assessment of the West Dauphin Chemical Site (Site) located at 2932 Dauphin Street in Philadelphia, Pennsylvania in accordance with the National Oil and Hazardous Substances Contingency Plan (NCP), 40CFR Part 300. The assessment revealed the threat of release of hazardous substances to the environment posing a threat to public health or welfare or the environment. The OSC determined that the Site meets the criteria of Section 300.415 of the NCP for initiating a Removal Action. As a result of site conditions, an emergency removal response action pursuant to Section 104 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) as amended, 42, USC Section 9604, was initiated at the Site on 17 August 2000.

This Special Bulletin B documents the verbal approval for a \$150,000 increase in the removal action budget, increasing the budget from \$200,000 to \$350,000. Verbal approval was granted on September 13, 2000 in response to the OSC's request on the same date. The request was made based on the increasing costs associated with the Site and the lack of sufficient time to gain approval of a formal additional funding request memorandum (draft submitted for concurrence on September 8, 2000). The formal additional funding request memo, requesting in excess of \$750,000 to raise the ceiling above \$1,000,000, was submitted in order to complete the emergency removal response action. The additional funds will be used to continue the mitigation of threats posed by the Site by properly segregating and stabilizing chemical-containing drums and containers, characterizing drum and container contents, providing site security at this now abandoned property, bulking chemicals when appropriate, providing for transport and disposal (or recycling/use) of containerized chemicals and restoring the adjacent property currently being used by EPA for drum staging/handling.

II. Background

At approximately 1300 hours on Thursday, 17 August 2000, the EPA Regional Response Center received a spill notification report from the National Response Center regarding an abandoned and unsecured facility in a residential area of the Strawberry Mansion section of north Philadelphia at 2932 West Dauphin Street. The report noted that the facility contained numerous incompatibly stored drums containing various hazardous materials. Notification was made by the City of Philadelphia's Emergency Operations Center. At about the same time, a call was made by the Philadelphia Fire Department Hazardous Materials Unit (PFD-HMU) to the Regional Response Center requesting EPA assistance. OSCs Kelly and Taurino responded to the scene, arriving at approximately 1430 hours, and met with representatives of the PFD-HMU, Philadelphia Police Department (PPD), Pennsylvania Department of Environmental Protection (PADEP), and EPA's Criminal Investigation Division. The Philadelphia Police Department was in the process of conducting a criminal investigation of the facility and had recently arrested the operator on several charges including storing/processing large amounts of chemicals without a permit and risking a catastrophe. The facility consists of a three story row house (2932 West Dauphin Street), an adjacent driveway or yard area, and a warehouse (originally a stable) immediately behind the house.

OSCs Kelly and Taurino conducted an inspection of the facility along with members of PFD-HMU and the EPA Superfund Technical Assessment and Response Team (START); based upon the findings of this inspection (described in detail in POLREP 001 and Special Bulletin A), OSC Kelly initiated a removal action under CERCLA. Activities conducted at the site since that time have identified numerous hazardous substances present at the site including acids, bases, flammable liquids and solids, oxidizers, and peroxides. In addition, the following labels appear on a number of drums and containers: Flammable, Poison, Corrosive, and Solvent. Specific chemical labels identified hydrofluoric acid, sulfuric acid, phosphoric acid, hydrochloric acid, glacial acetic acid, tetrahydrofuran, sodium hydroxide, ammonium hydroxide, butyl alcohol, methanol, propanol, n-butyl methacrylate monomer, polyethylene and/or ethylene glycol, xylenes, and ammonia. The majority of the chemicals listed above appear in 40 CFR Part 302, Table 302.4 "CERCLA Hazardous Substances and their Reportable Quantities".

Currently, over 400 drums of materials have been removed from the warehouse and staged in secure containment areas for sampling and characterization. Some materials have been restaged in the warehouse to limit damage from adverse weather conditions. In addition, over 200 five-gallon buckets containing various materials have been bulked and consolidated. Approximately 200 drums have been sampled and field tested ("haz cat") for hazardous characteristics. Contractor personnel continue to remove and stage drums from the warehouse, bulk and consolidate compatible materials contained in open five-gallon buckets, and sample drum contents for further characterization. Upon completion of sampling and characterization activities, materials will be grouped into compatible wastestreams and arrangements will be made for the transportation and disposal/disposition of materials from the Site. The OSC has begun to contact chemical manufacturers identified on drums containing product chemicals (or apparent product chemicals) and those contacted have shown an interest in taking back the containers for disposal or recycling.

The OSC continues to coordinate with the former site operator regarding his requests to be permitted to take back chemicals at the site and/or distribute them for sale. A formal letter will be drafted and sent to the former operator in the near future regarding this issue.

III. Threats to Public Health or Welfare or the Environment

Section 300.415 of the NCP (40 CFR 300.415) lists the factors to be considered in determining the appropriateness of a removal action. Paragraphs (b) (2) (i), (iii), (vi) and (vii) of Section 300.415 directly apply as follows to conditions at the Site.

- A. 300.415 (b) (2) (i) "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants"

The drums and containers holding hazardous substances were and are present both within and outside of a small warehouse located behind a rowhouse residence along West Dauphin Street. Numerous residents maintain dwellings adjacent to and across the street from the Site (on one side of the Site rowhouse is a vacant lot). The Site is abandoned and access is unrestricted; entrance to an area containing filled or partially filled drums and containers would merely require walking a few feet off the pavement. Many of the liquid-filled containers in this outside area were without lids or "bunghole" caps. Some drums were insecurely placed on pallets above ground level drums. The interior of the row house at the Site contains numerous liquid filled bottles and 5-gallon containers. It appears that the City of Philadelphia will not permit the operator to return to and reside at the row house since the owner of the house is deceased.

- B. 300.415 (b) (2) (iii) "Hazardous substances or pollutants or contaminants in drums, barrels, tanks or other bulk containers, that may pose a threat of release;"

Hazard categorization tests conducted at the site for drum samples have documented the presence of acids, bases, flammable liquids and solids, oxidizers, and peroxides. In addition, label information indicates the presence of the following specific compounds: sulfuric acid, hydrofluoric acid, glacial acetic acid, tetrahydrofuran, sodium hydroxide, ammonium hydroxide, butyl alcohol, picoline, methanol, hydrochloric acid, xylenes, propanol, n-butyl methacrylate monomer, and phosphoric acid, polyethylene glycol, petroleum distillates, and ammonia. The sampling and characterization of materials at the Site continues on a daily basis. The reliability of the labels on the drums is questionable and many of the drums/containers are unlabeled. The drums and containers were stored with little concern as to their compatibility and many pose a threat of release due to improper storage (e.g. double stacked, exposed to the weather). Some "product" drums are over 25 years old. Over 100 drums were stored outside of the warehouse, some in deteriorated condition. Many of the 5-gallon containers and small bottles contain liquids and are open, without lids.

C. 300.415 (b) (2) (vi)

"Threat of fire and explosion"

The presence of numerous drums and containers of flammable liquids, many open and exposed, pose a significant threat of fire and explosion. Hazard categorization tests conducted at the Site have documented the presence of flammable and oxidizer materials. The storage of containers stacked on top of each other and in close proximity to incompatible substances also increases the threat of fire and explosion should a chemical release occur resulting in chemical mixing. Personnel have questioned the structural soundness of the warehouse flooring, increasing the threat of containers contacting each other with force if structure failure occurred. Warehouse electrical wiring, although not inspected due to interior storage conditions, may not be up to code. The row house itself, at the least, has significant plumbing problems. The more than 200 outside containers/drums, several with openly visible liquid, were easily accessible to passersby and trespassers before EPA activated at the site.

D. 300.415 (b) (2) (vii)

"The availability of other appropriate federal or state response mechanisms to respond to the release"

Both PFD-HMU and PADEP have requested EPA assistance because they do not have the available resources to mitigate the threats posed by the Site. Neither PFD-HMU nor PADEP have the means to quickly and efficiently secure, characterize, segregate and properly recycle/dispose of the hazardous substances found at the Site.

IV. Endangerment Determination

The OSC determined, based upon information gathered from the emergency removal assessment, that the threat of a release of numerous hazardous substances presents an imminent and substantial endangerment to public health, welfare or the environment. For this reason, the OSC initiated an emergency removal action on August 17.

V. Actions and Estimated Costs

A. Actions

- Implement measures (e.g. installing fencing, removing vegetation, clearing debris, improving outside surface areas and interior conditions) to facilitate efficient and safe performance of the Removal Action.
- Provide site security measures to facilitate efficient performance of the Removal Action and to prevent unauthorized access to the Site, especially to contaminated areas.

- Provide field support facilities (e.g. trailer, phones, electrical service) to permit day-to-day operations.
- * Segregate incompatible drums, adequately close drums and containers, overpack and stage drums as necessary.
- Use necessary means, including sampling and analyses, to identify and verify container contents.
- Bulk or consolidate similar materials based on hazard categorization and/or other sampling and analyses.
- Conduct sampling and analyses of the contents of drums, containers or tanks to facilitate transportation and disposal.
- Prepare materials for off-site transportation and disposal to include overpacking, transfer to new DOT-acceptable drums, and labeling and marking as necessary. Dispose in accordance with 40 CFR Section 300.440.
- Identify potential users of unadulterated product materials and prepare for off site DOT acceptable shipping.
- Remove and dispose of contaminated soil, debris or interior furnishings/structures if discovered during the Removal Action and which pose a threat to human health or the environment. Decontaminate structures associated with operations at the site if feasible and economical.
- Arrange for temporary housing of displaced residents as needed.
- Conduct demolition or structural bracing if determined necessary for worker safety due to structural defects in the rowhouse or warehouse.
- Coordinate with State and local authorities on post-removal conditions and provide site restoration of the adjacent property to the site being utilized for drum staging and handling
- Demobilize personnel and equipment.

B. Original Estimated Total Cost:

	<u>Current Ceiling</u>
EPA (Direct)	\$ 15,000
EPA (Indirect)	\$ 25,000
START	\$ 35,000
ERRS	\$ 125,000
Total	\$ 200,000

Verbal Increase: \$150,000

	<u>Est. Costs to Date</u>	<u>New Ceiling</u>	<u>Above Current</u>
EPA (Direct)	\$ 8,000	\$ 25,000	(+ \$10,000)
EPA (Indirect)	\$ 13,500	\$ 45,000	(+ \$20,000)
REAC	\$	\$ 10,000	(+ \$10,000)
ERRS	\$ 97,000	\$ 225,000	(+ \$100,000)
START	\$ 12,500	\$ 45,000	(+ \$10,000)
TOTAL		\$ 350,000	\$150,000

C. Contribution to Remedial Performance

The proposed removal action is not expected to be inconsistent with or hinder any potential future remedial actions at the site. The OSC will inform the EPA Region III Site Assessment Section of actions at the site and make data available as requested.

D. Compliance with ARARs

The proposed removal action set forth in this special bulletin will comply with all environmental and health Applicable and Relevant and Appropriate Requirements (ARARs), to the extent practicable, considering the exigencies of the situation.

VII. Expected Changes in the Situation Should No Action be Taken or Action Delayed

Inaction would result in a continuing serious health threat to the nearby population. Drums and containers would deteriorate furthering the chances for chemical release. Should the site remain abandoned, a greater opportunity for trespassing and vandalism might result in chemical injury, fire, explosion, or chemical release. Building deterioration could result in damage to drums and containers, again increasing the potential for a release. It is doubtful that State or Local agencies would have the resources to adequately correct the situation; at the least, resources would greatly be extended, jeopardizing response capabilities at other unrelated incidents.

VIII. Outstanding Policy Issues

There are no known outstanding policy issues associated with the West Dauphin Street Chemical Site.

IX. Enforcement

The principal potentially responsible party (PRP) at the site appears to be the facility operator. Efforts are ongoing to identify the owner of the Site (the owner listed on the property deed is deceased). Currently, the facility operator is unable to conduct appropriate removal actions at the site. Drum labels and miscellaneous recent shipping papers obtained by the City indicate that waste materials were shipped to the Site from Pyramid Chemical Company in Pottstown, Pennsylvania, a facility subject to recent EPA Region III Superfund enforcement activities. Product manufacturer labels appearing on what seem to be product-containing drums identify a number of major U.S. chemical companies (with addresses) as the manufacturer of the drum contents. However, some or many of the drums may have been forwarded from intermediary locations before arriving at the Site and it is not clear how many may now actually contain waste or materials different from the original contents. OSC Kelly has been in contact with representatives of several chemical manufacturers associated with drums at the Site, and continues to explore the possibility of those companies accepting responsibility for the ultimate disposal of these materials. Both the City of Philadelphia Police Department and EPA Region III's Criminal Investigations Division are actively investigating the Site and operator.

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